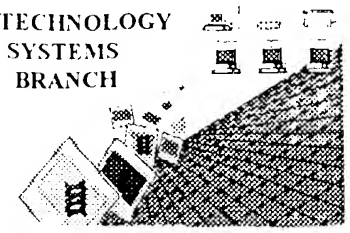
0590
0702

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/083,641
Source: OIPE
Date Processed by STIC: 7/9/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/083,641

DATE: 07/09/2002
TIME: 14:04:28

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

Does No. Comply
Corrected Diskette Needed
JP 2,6

```
 3 <110> APPLICANT: HAYSTEAD, TIMOTHY A
 5 <120> TITLE OF INVENTION: SMOOTH MUSCLE MYOSIN PHOSPHATASE ASSOCIATED KINASE
 7 <130> FILE REFERENCE: 1579-647
 9 <140> CURRENT APPLICATION NUMBER: 10/083,641
10 <141> CURRENT FILING DATE: 2002-02-27
12 <150> PRIOR APPLICATION NUMBER: 60/271,436
13 <151> PRIOR FILING DATE: 2001-02-27
15 <160> NUMBER OF SEQ ID NOS: 17
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 15
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Description of Artificial Sequence: Endogenous kinase
26       copurifies with SMPP-1M
28 <400> SEQUENCE: 1
29 Lys Lys Lys Arg Gln Ser Arg Arg Ser Thr Gln Gly Val Thr Leu
30   1               5                  10                  15
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 13
35 <212> TYPE: PRT
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: human pDAPK3
41 <400> SEQUENCE: 2
42 Met Gly Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val
43   1               5                  10
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 320
48 <212> TYPE: PRT
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Description of Artificial Sequence: ZIP Kinase
54 <400> SEQUENCE: 3
55 Met Ser Thr Phe Arg Gln Glu Asp Val Glu Asp His Tyr Glu Met Gly
56   1               5                  10                  15
58 Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Arg Lys Cys Arg Gln
59              20                  25                  30
61 Lys Gly Thr Gly Lys Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg
62          35                  40                  45
64 Leu Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu
65      50                  55                  60
```

RAW SEQUENCE LISTING DATE: 07/09/2002
PATENT APPLICATION: US/10/083,641 TIME: 14:04:28

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

```
 67 Val Asn Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His
 68  65                  70                  75                  80
 70 Asp Ile Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val
 71                  85                  90                  95
 73 Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr
 74             100                 105                 110
 76 Glu Asp Glu Ala Thr Gln Phe Leu Lys Gln Ile Leu Asp Gly Val His
 77         115                 120                 125
 79 Tyr Leu His Ser Lys Arg Ile Ala His Phe Asp Leu Lys Pro Glu Asn
 80     130                 135                 140
 82 Ile Met Leu Leu Asp Lys Asn Val Pro Asn Pro Arg Ile Lys Leu Ile
 83 145                 150                 155                 160
 85 Asp Phe Gly Ile Ala His Lys Ile Glu Ala Gly Asn Glu Phe Lys Asn
 86                 165                 170                 175
 88 Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu
 89             180                 185                 190
 91 Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr
 92         195                 200                 205
 94 Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Glu Thr Lys Gln Glu
 95     210                 215                 220
 97 Thr Leu Thr Asn Ile Ser Ala Val Asn Tyr Asp Phe Asp Glu Glu Tyr
 98 225                 230                 235                 240
100 Phe Ser Ser Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
101                 245                 250                 255
103 Val Lys Asp Pro Lys Arg Arg Met Thr Ile Ala Gln Ser Leu Glu His
104             260                 265                 270
106 Ser Trp Ile Lys Val Arg Arg Arg Glu Asp Gly Ala Arg Lys Pro Glu
107         275                 280                 285
109 Arg Arg Arg Leu Arg Ala Ala Arg Leu Arg Glu Tyr Ser Leu Lys Ser
110     290                 295                 300
112 His Ser Ser Met Pro Arg Asn Thr Ser Tyr Ala Ser Phe Glu Arg Phe
113 305                 310                 315                 320
119 <210> SEQ ID NO: 4
120 <211> LENGTH: 13
121 <212> TYPE: PRT
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Description of Artificial Sequence: rat DAP-like kinase
127 <220> FEATURE:
128 <221> NAME/KEY: Unsure
129 <222> LOCATION: (6),((10))
130 <223> OTHER INFORMATION: Xaa can be any amino acid
132 <400> SEQUENCE: 4
W--> 133 Met Leu Leu Asp Lys Xaa Ile Phe Xaa Arg Pro Ile Gln
134   1               5                  10
137 <210> SEQ ID NO: 5
138 <211> LENGTH: 13
139 <212> TYPE: PRT
140 <213> ORGANISM: Artificial Sequence
```

Xaa is at location 9. Arg is at location 10.

RAW SEQUENCE LISTING DATE: 07/09/2002
PATENT APPLICATION: US/10/083,641 TIME: 14:04:28

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: D-glycerate dehydrogenase
145 <220> FEATURE:
146 <221> NAME/KEY: Unsure
147 <222> LOCATION: (8), (10), (11) and (13)
148 <223> OTHER INFORMATION: Xaa can be any amino acid
150 <400> SEQUENCE: 5
W--> 151 **Met Thr Ile Ala Gln Asn Leu Xaa Tyr Xaa Xaa Ile Xaa**
152 1 5 10
155 <210> SEQ ID NO: 6
156 <211> LENGTH: 1093
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence: Putative nucleotide
162 sequence of smooth muscle MYPT-Kinase
164 <220> FEATURE:
165 <221> NAME/KEY: Unsure
166 <222> LOCATION: (2), (7), (37), (39), (1056), (1081) and (1092)
167 <223> OTHER INFORMATION: N can be A, C, G or T
169 <400> SEQUENCE: 6
W--> 170 **gntatgnata tcggtttaat cggccggagc tcgcccncng ggcagctgga ctccctctca 60**
171 gacctccttc tttctcgccc tcagcacggg attaacctca cttgactgtt cttgggtccc 120
172 cggtgccggg ccagcgtcct ctccctcaag gcaatcccca agtgtctgtc atgaggctct 180
173 ttgggcagtt ctgttgttgt gggaaacctg ggaacagatg cacagaggct ggggtacaga 240
174 gtcctgcctt cctctgggtc tgcagcgctt agctgttcct tcccccacag cggccagttc 300
175 gccatcgtgc gcaagtgcca gcagaagggc accggcatgg agtacgcggc caagttcata 360
176 aagaagcggc gcctgccgtc cagccggcgc ggtgtgagcc gtgaggagat cgagcgcgag 420
177 gtgagcatcc tgcgcgagat ccgccacccc aacatcatca cgctgcacga tgtgttcgag 480
178 aacaagacag atgtggtgct gatcttggag ctggtgtccg gcggcgaact tttcgacttt 540
179 ctggctgaga aggatcactg acagaggatg aggccacgca gttcctcaag cagatcctgg 600
180 acggtgtcca ctacctgcac tccaagcgca tcgcgcactt tgacctgaag ccggagaaca 660
181 tcatgttgct ggacaagcat gcagccagcc cacgcattaa gctcatcgac tttggcatcg 720
182 cgcacaggat cgaggccggt agcgagttca agaacatctt tggcacgcca gagttcgtcg 780
183 gtgaggggca ggtgtgggca ccacccgata gggtagattt tgcacggcct tggcctgacc 840
184 tgcctcaaca atcctgtctt ccacagcccc tgagattgta aactatgaac cacttggctt 900
185 ggaagctgat atgtggagca tcggcgtcat cacctacatc ctgtgagtgc ctgagatggg 960
186 caggggcctc agactgtacc tgctagaggc ccagggatca gggctggcac ctctgcaaac 1020
W--> 187 **tgcaaacact ggggctgaga gatgtccctg ggaacnctgg atatgcctgg gccccaccaa 1080**
W--> 188 **ngtaggacca tnc 1093**
191 <210> SEQ ID NO: 7
192 <211> LENGTH: 34
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid sequence of rat
198 aorta smooth muscle MYPT-kinase
200 <220> FEATURE:
201 <221> NAME/KEY: Unsure

RAW SEQUENCE LISTING DATE: 07/09/2002
PATENT APPLICATION: US/10/083,641 TIME: 14:04:28

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

202 <222> LOCATION: (1), (3) and (13)
203 <223> OTHER INFORMATION: Xaa can be any amino acid
205 <400> SEQUENCE: 7
206 Xaa Met Xaa Ile Gly Leu Ile Gly Arg Ser Ser Pro Xaa Gly Gln Leu
207 1 5 10 15
209 Asp Ser Leu Ser Asp Leu Leu Leu Ser Arg Pro Gln His Gly Ile Asn
210 20 25 30
212 Leu Thr
216 <210> SEQ ID NO: 8
217 <211> LENGTH: 22
218 <212> TYPE: PRT
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid sequence of rat
223 aorta smooth muscle MYPT-kinase
225 <400> SEQUENCE: 8
226 Leu Phe Leu Gly Pro Arg Cys Arg Ala Ser Val Leu Ser Leu Lys Ala
227 1 5 10 15
229 Ile Pro Lys Cys Leu Ser
230 20
233 <210> SEQ ID NO: 9
234 <211> LENGTH: 125
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid sequence of rat
240 aorta smooth muscle MYPT-kinase
242 <400> SEQUENCE: 9
243 Gly Ser Leu Gly Ser Ser Val Val Val Gly Asn Leu Gly Thr Asp Ala
244 1 5 10 15
246 Gln Arg Leu Gly Tyr Arg Val Leu Pro Ser Ser Gly Ser Ala Ala Leu
247 20 25 30
249 Ser Cys Ser Phe Pro His Ser Gly Phe Ala Ile Val Arg Lys Cys Lys
250 35 40 45
252 Gly Thr Gly Met Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg Leu
253 50 55 60
255 Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu Val
256 65 70 75 80
258 Ser Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His Asp
259 85 90 95
261 Val Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val Ser
262 100 105 110
264 Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Asp His
265 115 120 125
268 <210> SEQ ID NO: 10
269 <211> LENGTH: 28
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:

RAW SEQUENCE LISTING DATE: 07/09/2002
PATENT APPLICATION: US/10/083,641 TIME: 14:04:28

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

```
274 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
275       acid sequence of rat aorta smooth muscle
276       MYPT-kinase
278 <400> SEQUENCE: 10
279 Gln Arg Met Arg Pro Arg Ser Ser Ser Ser Arg Ser Trp Thr Val Ser
280   1               5                  10                  15
282 Thr Thr Cys Thr Pro Ser Ala Ser Arg Thr Leu Thr
283              20                  25
286 <210> SEQ ID NO: 11
287 <211> LENGTH: 55
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
293       acid sequence of rat aorta smooth muscle
294       MYPT-kinase
296 <400> SEQUENCE: 11
297 Ser Arg Arg Thr Ser Cys Cys Trp Thr Ser Met Gln Pro Ala His Ala
298   1               5                  10                  15
300 Leu Ser Ser Ser Thr Leu Ala Ser Arg Thr Gly Ser Arg Pro Val Ala
301              20                  25                  30
303 Ser Ser Arg Thr Ser Leu Ala Arg Gln Ser Ser Ser Val Arg Gly Arg
304          35                  40                  45
306 Cys Gly His His Pro Ile Gly
307      50                  55
310 <210> SEQ ID NO: 12
311 <211> LENGTH: 18
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
317       acid sequence of rat aorta smooth muscle
318       MYPT-kinase
320 <400> SEQUENCE: 12
321 Ile Leu His Gly Leu Gly Leu Thr Cys Leu Asn Asn Pro Val Phe His
322   1               5                  10                  15
324 Ser Pro
328 <210> SEQ ID NO: 13
329 <211> LENGTH: 4
330 <212> TYPE: PRT
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
335       acid sequence of rat aorta smooth muscle
336       MYPT-kinase
338 <400> SEQUENCE: 13
339 Asp Cys Lys Leu
340   1
343 <210> SEQ ID NO: 14
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/09/2002
PATENT APPLICATION: US/10/083,641 TIME: 14:04:29

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 6,9
Seq#:5; Xaa Pos. 8,10,11,13
Seq#:6; N Pos. 2,7,37,39,1056,1081,1092
Seq#:7; Xaa Pos. 1,3,13
Seq#:17; Xaa Pos. 15,18